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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/843,046	04/26/2001	Toshitaka Shibata	14998.270	8913

7590 11/06/2002

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EXAMINER

BELLAMY, TAMIKO D

ART UNIT	PAPER NUMBER
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2856

DATE MAILED: 11/06/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/843,046

Applicant(s)

SHIBATA ET AL.

Examiner

Tamiko D. Bellamy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 3, 8/3, and 9 are rejected under 35 U.S.C. 102(a) as being anticipated by Nomura et al. (5,948,991).

As to claim 3, Nomura et al. discloses in Fig. 8 a resin 132 that covers the pressure-sensitive section 130 (col. 7, lines 24-28, col. 9, lines 38-46), a lead 131 connected to the terminal of the pressure-sensitive section and extracts a pressure signal (col. 10, lines 1-8).

As to claim 8/3 Nomura et al. discloses a pressure sensor used in measuring the aspired air of an engine (col. 5, lines 10-14, col. 6, lines 9-19).

As to claim 9 Nomura et al. discloses in Figs. 6 and 7 a pressure sensor 121 that is provided in an aspired air manifold of an engine (col. 5, lines 10-14, col. 6, lines 9-19).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 4-7, 8/1, 8/2, and 8/4-8/7 are rejected under 35 U.S.C. 103(a) as being obvious over Nomura et al. (5,948,991) in the view of Shoji et al. (5,490,424).

As to claim 1, Nomura et al. discloses in Figs. 3, 8 and 15 a base 133a (col. 7, lines 43-44), a pressure-sensitive section 11 (col. 4 lines 10-12,), a pressure injection section 109, 109b (col. 4, lines 47-48; 64-67)(cl.1), a lead 16 connected to a pressure-sensitive section 11 and extracts a pressure detection signal (col. 4, line 36-39, col. 10, lines 1-8).

As to claims 2, 6, and 7, Nomura et al. discloses in Fig. 13 a pressure-sensitive section 130 enclosed by a sensor package 132 (col. 9, lines 53-55).

As to claim 4, Nomura discloses a resin that is a fluoric gel. Nomura also makes use of a gel-like silicone resin as a protective member 132 to protect the sensor chip 130 (col. 4, lines 23-26, col. 7, lines 24-29). As one with ordinary skill in the art, knows that a fluoric elastomer is a material that has a rubbery-like elasticity. The gel-like protective member 132 is therefore inherently a fluoric gel (Fig 3(15), col.4, lines 23-26)(cl.4)

As to claims 8\1, 8\2, 8\4-8\7 Nomura et al. discloses a pressure sensor used in measuring the aspired air of an engine (col. 5, lines 10-14, col. 6, lines 9-19).

Nomura et al. does not clearly disclose a pressure-sensitive section affixed by a fluoric elastomer (cls. 1 and 5). However, Nomura et al., does make use in Fig 3 of a pressure sensitive element 10 that is fixed to the resin block 3 by a resin adhesive agent 14. It would have been obvious at the time the invention was made to replace the adhesive element 14 with a fluoric elastomer, for the purpose of providing a pressure sensor that is protected from contamination and set the sensor at a predetermined position to increase the sensor's sensitivity.

As to claims 1 and 5, Shoji et al. discloses in Fig. 3 a pressure sensor section 32 affixed by a fluoric elastomer 17 (col. 7, lines 65-67, col.8 lines 1-5). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify Nomura et al.

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in the view of Shoji et al., to use a fluoroc elastomer type resin for the purpose of providing a more corrosion resistant sensor.

Response to Remarks

Applicant's arguments with respect to claims 1-9 have been considered but are moot in view of the new ground(s) of rejection. It is the examiners position that claims 1-9 are not patentable over the newly applied art of Nomura et al. in view of Shoji et al.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamiko D. Bellamy whose telephone number is (703) 305-4971. The examiner can normally be reached on Monday through Friday 8:30 AM to 5:30PM.

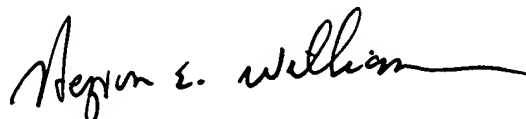
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (703) 305-4705. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

Tamiko Bellamy

T.B.

September 19, 2002



HEZRON WILLIAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800